# Lab Farm 2



Inias Somers Seppe De Beule Sam Van Bogaert Raymond Mohammad Gilian Sterckx Kevin Van de Vyver

## **Taakverdeling**

Seppe De Beule

⇒ Plant Conditioning

⇒ Web Dashboard

Sam Van Bogaert

⇒ Plant Conditioning

⇒ Sensoren

Inias Somers

⇒ Plant Robot

 $\Rightarrow$  PCB

Kevin Van de Vyver

⇒ Plant Robot

⇒ Constructie

Raymond Mohammad

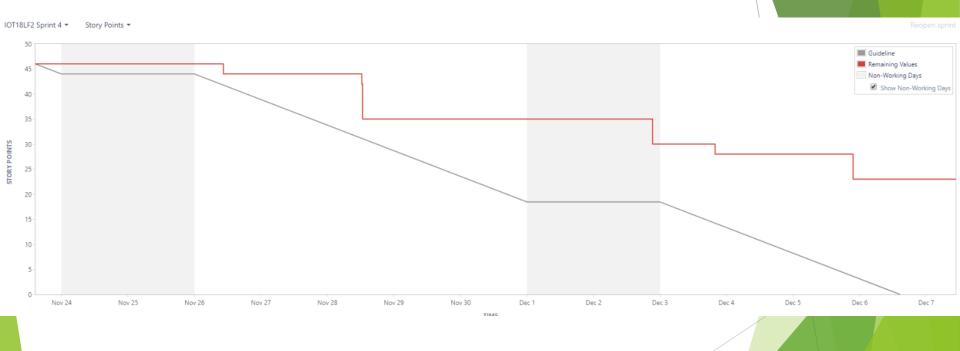
⇒ Project Manager

 $\Rightarrow$  API

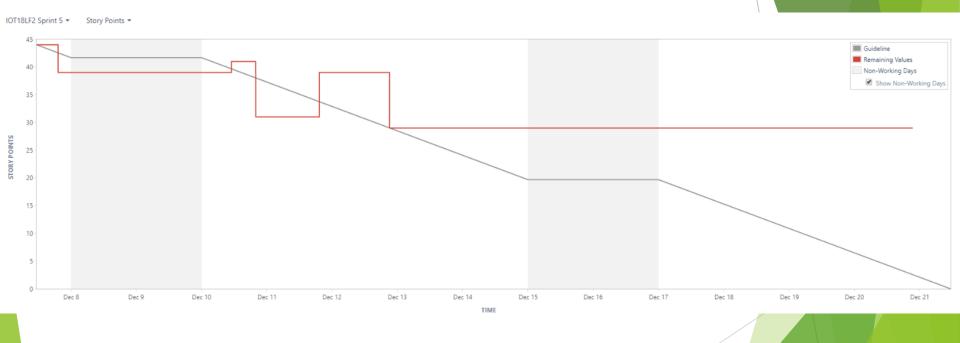
Gilian Sterckx

⇒ Beeldherkenning

## Burndown chart sprint 4



## Burndown chart sprint 5



## Afgewerkte stories

Completed Issues						View in Issue navigator	
Key	Summary		Issue Type	Priority	Status	Story Points (25)	
IOT18LF2-27	As a developer, I want to be able to easily connect components		Story	↑ Medium	DONE	2	
IOT18LF2-28	As a developer I want to make a PCB design for the general circuit		Story	↑ Medium	DONE	8	
IOT18LF2-50	As a developer i want to make a PCB design for the backup battery circuit		Story	↑ Medium	DONE	5	
IOT18LF2-88 *	As a developer, I want to create an circuit that controls the ledstrip		Story	↑ Medium	DONE	2	
IOT18LF2-89 *	As a developer i want to make the final PCB designs		Story	↑ Medium	DONE	8	
Completed Issues View in					in Issue navigator	or	
Key	Summary	Issue Type	Priority	Status	Story Points (23)		
IOT18LF2-3	As a user I want to receive a notification if a variable is too low	Story	↑ Medium	DONE	2		
IOT18LF2-4	As a user I want to receive a notification if a variable is too high	Story	↑ Medium	DONE	2		
IOT18LF2-34	As a user I want a finished first version of the PCB design	Story	↑ Medium	DONE	5		
IOT18LF2-36	As a user I want daily photos of my plant	Story	↑ Medium	DONE	2		
IOT18LF2-44	As a user I want to know how the water level sensor works	Story	↑ Medium	DONE	1		
IOT18LF2-48	As a developer , i want to test the LED strip	Story	↑ Medium	DONE	2		
IOT18LF2-49	As a user I want the components to have the correct power levels	Story	↑ Medium	DONE	2		
IOT18LF2-52	As a developer, I want to retrieve all sensor history data	Story	↑ Medium	DONE	2		
IOT18LF2-77	As a developer, I want to test the steppermotor	Story	↑ Medium	DONE	2		
IOT18LF2-85	As a developer i want to make the final electric circuit	■ Story	↑ Medium	DONE	3		

## Sensoren & Python script

- Waterniveau sensor van het waterreservoir werkt
- Inkomende data geformatteerd
- MQTT published op topic

Ledstrip

- Ledstrip werkend gekregen
- Besturing via MOSFETs

Raspberry  $Pi \rightarrow MOSFET \rightarrow Ledstrip$ 



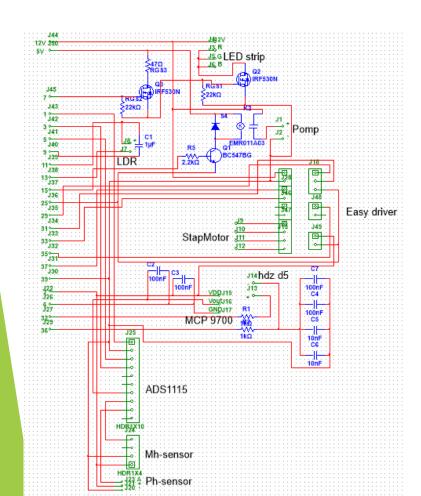
#### **Dashboard**

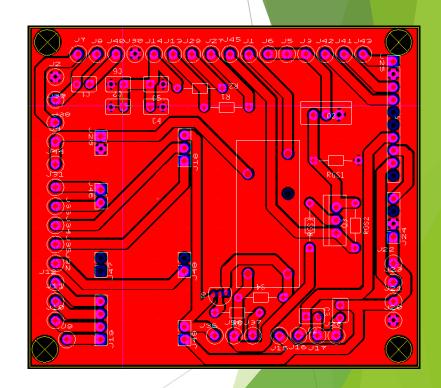
- MQTT optie toegevoegd
- Functionele tweaks (URL's, sidebar veranderd)

#### **API**

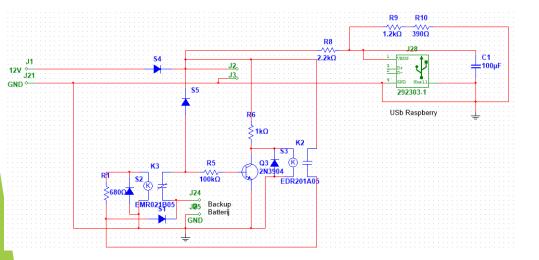


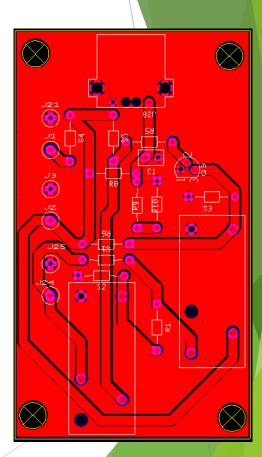
#### PCB





#### PCB





### Beeldherkenning

- Verbinding met imgur.api is gelegd
- Imgur API zal gebruikt worden als database voor de afbeeldingen



## **Planning**

- Constructie afwerken (tandwielen + plaatje + stappenmotor)
- Led strip besturen ( Manueel via dashboard )
- PCB's werkend hebben
- Pomp aansluiten
- Sensor data op datum